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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/580,419

07/28/2006

Kiyotaka Yoshii

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04/01/2009

OLIFF & BERRIDGE, PLC

P.O. BOX 320850

ALEXANDRIA, VA 22320-4850

EXAMINER

MCCLELLAND, KIMBERLY KEIL

ART UNIT

PAPER NUMBER

1791

MAIL DATE

DELIVERY MODE

04/01/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/580,419	Applicant(s) YOSHII, KIYOTAKA	
	Examiner KIMBERLY K. MCCLELLAND	Art Unit 1791	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01/12/09.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 2-10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 2-10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 May 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

1. Supplemental replies will not be entered as a matter of right, except when a supplemental reply is filed within a suspended period under 37 CFR 1.103(a) or (c) (e.g., a suspension of action requested by the applicant when filing an RCE). See MPEP § 709 regarding suspension of action. The Office may enter a supplemental reply if the supplemental reply is clearly limited to:

- (A) cancellation of a claim;
- (B) adoption of the examiner's suggestions;
- (C) placement of the application in condition of allowance;
- (D) reply to an Office requirement made after the first reply was filed;
- (E) correction of informalities (e.g., typographical errors); or
- (F) simplification of issues for appeal.

2. In the current application, the supplemental amendment filed 01/12/09 will be entered, as agreed upon in the interview on 01/22/09, as a correction of informalities.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claim 8 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. It is unclear how dependent claim 8 further limits independent

claim 7. Examiner notes the strip member is drawn to contents of the currently claimed apparatus, not the apparatus itself. Expressions relating the apparatus to contents thereof during an intended operation are of no significance in determining patentability of the apparatus claim. Ex parte Thibault, 164 USPQ 666, 667 (Bd. App. 1969). As the apparatus is not limited to any particular strip material, it is unclear how a pitch width dependent upon strip member dimensions further limits the independent claim. Furthermore, the term "corresponds to" does not define any particular relationship. Clarification as to what further structural limitation is being recited is required.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 4-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Japanese Patent Application Publication No. 05-220865 to Adachi et al. (machine translation provided) in view of International Patent Application Publication No. WO 02/102579 to Suda.

7. As to claim 4, Adachi et al. discloses the high adhesion sections in at least the leading end application region have outer surfaces in the form of mirror-finished surfaces (See Abstract).

8. As to claim 5, this claim is not found to structurally limit the current invention. The method of forming the mirrored surface does not structurally alter the mirrored surface. Adachi et al. discloses the mirror-finished surfaces are formed as high-adhesion surfaces (i.e. stuck powerfully and does not exfoliate easily; See paragraph 0007), which requires the same physical characteristics to perform the same function as that recited by applicant. Consequently, Adachi's disclosure of a high-adhesion mirror-finished surface appears to be the same as the plated mirror surface of applicant's disclosure. Once the Examiner provides a rationale tending to show that the claimed product appears to be the same or similar to that of the prior art, although produced by a different process, the burden shifts to applicant to come forward with evidence establishing an unobvious difference between the claimed product and the prior art product. *In re Marosi*, 218 USPQ 289, 292 (Fed. Cir. 1983).

9. As to claim 6, Adachi et al. discloses the low adhesion sections and the high adhesion sections in at least the leading end application region are arranged alternately in the axial direction (see paragraph 0007 and Figures 3-4).

10. With respect to claim 7, Adachi et al. discloses a molding drum, including a transfer drum; said transfer drum being provided, on its outer peripheral surface, with a leading end application region, and a plurality of application regions following said leading end application region and arranged in the circumferential direction of the transfer drum, said application regions being divided into a plurality of low adhesion sections with a low adhesion force, and a plurality of high adhesion sections with a high adhesion force, said low adhesion sections and said high adhesion sections being

alternately arranged in the width direction of the transfer drum; radial expansion/contraction means; said radial expansion/contraction means comprising collective expansion/contraction means and moving means (See Abstract, and paragraphs 0007, 0010, and Figures 3-4). Adachi et al. does not specifically disclose a receiver drum.

11. Suda discloses an apparatus for forming tire components including a receiving roller (11) capable of rotating in an opposite direction to the transfer drum (12; See Figures 1 and 3-1-4-2). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the receiving roller taught by Suda with the molding drum of Adachi et al. The motivation would have been to safely and efficiently remove the formed tire component from the molding drum.

12. Examiner notes the phrases, “structured to form the sheet member by applying the plurality of strip members onto an outer peripheral surface of the transfer drum so that the width direction of each strip member is oriented in the circumferential direction of the transfer drum”, “structured to form the cylindrical tire constitutive member by joining the leading end and the trailing end of the sheet member which has been transferred from the transfer drum, with the transfer drum urged against the receiver drum and the receiver drum rotated in an opposite direction to the transfer drum”, and “that is structured to apply a strip member forming the leading end of the sheet member” are considered intended use of the current apparatus. The examiner would like to note that while features of an apparatus may be recited either structurally or functionally, claims directed to an apparatus must be distinguished from the prior art in terms of

structure rather than function. In re Schreiber, 128 F.3d 1473, 1477-78, 44 USPQ2d 1429, 1431-32 (Fed. Cir. 1997); “[A]pparatus claims cover what a device is, not what a device does.” Hewlett-Packard Co. v. Bausch & Lomb Inc., 909 F.2d 1464, 1469, 15 USPQ2d 1525, 1528 (Fed. Cir. 1990) (emphasis in original). A claim containing a “recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus” if the prior art apparatus teaches all the structural limitations of the claim. Ex parte Masham, 2 USPQ2d 1647 (Bd. Pat. App. & Inter. 1987). See MPEP § 2114. This rejection is based on the fact the apparatus structure taught above has the inherent capability of being used in the manner intended by the Applicant.

13. As to claim 8, this claim does not appear to further limit independent claim 7. Expressions relating the apparatus to contents thereof during an intended operation are of no significance in determining patentability of the apparatus claim. Ex parte Thibault, 164 USPQ 666, 667 (Bd. App. 1969). As the plurality of regions of Adachi are provided at a pitch, any strip member may be used to correspond in width to the apparatus pitch.

14. Claims 2-3 rejected under 35 U.S.C. 103(a) as being unpatentable over Japanese Patent Application Publication No. 05-220865 to Adachi et al. (machine translation provided) in view of International Patent Application Publication No. WO 02/102579 to Suda as applied to claims 4-8 above, and further in view of U.S. Patent No. 5,624,780 to Nishimori et al.

15. With respect to claim 2, Adachi et al. discloses a molding drum, including low adhesion surfaces (See paragraph 0007). However, Adachi et al. does not specifically disclose what material is used for the low adhesion surface.

16. Nishimori et al. discloses an image transfer roller, including using roller coated with a resilient material (i.e. silicone rubber) as a release surface to provide low adhesion (column 11, lines 4-9). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the resilient release material taught by Nishimori et al. with the molding drum of Adachi et al. The motivation would have been to prevent sticking of the substrate to the drum.

17. As to claim 3, Adachi et al. discloses a molding drum, including low adhesion surfaces (See paragraph 0007). However, Adachi et al. does not specifically disclose what material is used for the low adhesion surface.

18. Nishimori et al. discloses an image transfer roller, including using roller coated with silicone rubber as a release surface to provide low adhesion (column 11, lines 4-9). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the silicone rubber release material taught by Nishimori et al. with the molding drum of Adachi et al. The motivation would have been to prevent sticking of the substrate to the drum.

19. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Japanese Patent Application Publication No. 05-220865 to Adachi et al. (machine translation provided) in view of International Patent Application Publication No. WO 02/102579 to

Suda as applied to claims 4-8 above, and further in view of U.S. Patent No. 6,863,106 to Currie et al.

20. As to claim 9, Adachi et al. discloses radial expansion/contraction means; said radial expansion/contraction means comprising collective expansion/contraction means and moving means for individually moving radially inwards the high adhesion sections in the remaining application region (See Abstract, and paragraphs 0007, 0010, and Figures 3-4). Adachi et al. does not specifically disclose the low adhesion sections and high adhesion sections are flush.

21. Currie et al. discloses a tire building drum, including the two sections are flush (See Figure 2C). It would have been obvious to one of ordinary skill in the art to use the flush configuration taught by Currie et al. in the device of Adachi et al. The motivation would have been to prevent wrinkling or trapping air between tire components (column 2, lines 28-30).

22. Examiner notes the phrases, "for moving the high adhesion sections radially inwards of the low adhesion sections, said high adhesion sections and low adhesion sections being flush with each other when the narrow strip members are applied to the transfer drum, and said high adhesion sections being moved by said radial expansion/contraction means radially inwards of the low adhesion sections, when the sheet member is transferred from the transfer drum to the receiver drum", "being flush with each other when the narrow strip members are applied to the transfer drum", "when the sheet member is transferred from the transfer drum to the receiver drum", "or moving radially inwards the high adhesion sections in the leading end application region

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and the application region adjacent thereto, respectively”, and “for individually moving radially inwards the high adhesion sections in the remaining application regions” are considered intended use of the current apparatus. The examiner would like to note that while features of an apparatus may be recited either structurally or functionally, claims directed to an apparatus must be distinguished from the prior art in terms of structure rather than function. In re Schreiber, 128 F.3d 1473, 1477-78, 44 USPQ2d 1429, 1431-32 (Fed. Cir. 1997); “[A]pparatus claims cover what a device is, not what a device does.” Hewlett-Packard Co. v. Bausch & Lomb Inc., 909 F.2d 1464, 1469, 15 USPQ2d 1525, 1528 (Fed. Cir. 1990) (emphasis in original). A claim containing a “recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus” if the prior art apparatus teaches all the structural limitations of the claim. Ex parte Masham, 2 USPQ2d 1647 (Bd. Pat. App. & Inter. 1987). See MPEP § 2114. This rejection is based on the fact the apparatus structure taught above has the inherent capability of being used in the manner intended by the Applicant.

23. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Japanese Patent Application Publication No. 05-220865 to Adachi et al. (machine translation provided) in view of International Patent Application Publication No. WO 02/102579 to Suda and U.S. Patent No. 6,863,106 to Currie et al. as applied to claim 9 above, and further in view of U.S. Patent No. 3,888,720 to Habert.

24. Adachi et al. does not specifically disclose a collective expansion/contraction means comprising cam followers which are pivoted to the high adhesion sections, respectively, and movable radially inwards and outwards, a rotary cam which can be rotated to move the cam followers radially inwards and outwards, and cam driving means for rotating the rotary cam in the circumferential direction of the transfer drum.

25. Habert discloses a tire building machine including aid collective expansion/contraction means comprising cam followers which are capable of pivoting to the high adhesion sections, respectively, and capable of moving radially inwards and outwards, a rotary cam which can be rotated to move the cam followers radially inwards and outwards, and cam driving means for rotating the rotary cam in the circumferential direction of the transfer drum (column 2, lines 47-64; See Figure 8). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the expansion contraction means taught by Habert with the expanding/contracting molding drum of Adachi et al. The motivation would have been to provide reliable means for expansion and contraction of the molding drum.

Response to Arguments

26. Applicant's arguments with respect to claims 2-10 have been considered but are moot in view of the new ground(s) of rejection. Applicant's remaining arguments are addressed below:

27. As to applicant's arguments that Adachi does not disclose a transfer drum, see Figures 2 and 4-6. Applicant states the drum of Adachi does not meet the limitations of

the currently claimed transfer drum, but provides no features or claim limitations which distinguish the currently claimed transfer drum over the drum of Adachi. In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., structured to cause the sheet member to be uniformly supported on the transfer drum in the circumferential direction during the transfer of the sheet member, low adhesion sections and the high adhesion sections uniformly supporting the sheet member) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). Furthermore, no specific structure is recited to distinguish over Adachi. "Uniform support" does not define a structural limitation. Claims directed to apparatus must be distinguished from the prior art in terms of structure rather than function. *In re Danly*, 263 F.2d 844, 847, 120 USPQ 528, 531 (CCPA 1959).

28. Applicant's remaining arguments are drawn to the dependency of claims 2-6 and 8-10 on independent claim 7. These arguments are not persuasive for the reasons noted above.

Conclusion

29. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

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§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to KIMBERLY K. MCCLELLAND whose telephone number is (571)272-2372. The examiner can normally be reached on 8:00 a.m.-5 p.m. Mon-Thr.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Philip C. Tucker can be reached on (571)272-1095. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Kimberly K McClelland/
Examiner, Art Unit 1791

KKM

/Philip C Tucker/
Supervisory Patent Examiner, Art Unit 1791